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SHORT COMMUNICATION

Phytopathogenicity of avian mycoplasma *Mycoplasma gallisepticum* S6: Morphologic and ultracytostructural changes in plants infected with the vegetative forms and the viable but nonculturable forms of the bacterium

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Abstract

The data obtained in this study proved that *Mycoplasma gallisepticum* S6 known as avian pathogen had a phytopathogenic potential. The vegetative forms and the viable but nonculturable (VBNC) forms of this mycoplasma could infect the plants via an assemblage of rootlets, invade different tissues, persist there and cause destructive events characteristic to phytomycoplasmoses. In comparison with the vegetative forms, the VBNC forms induced more prominent destructive changes. This phenomenon might be connected to increasing expression of proteins responsible for virulence in the bacterial cells. The fact that *M. gallisepticum* S6 could demonstrate virulent features (infectivity, invasiveness, persistence and toxigenicity) in regard to plants seems to require a development of new ways for controlling phytomycoplasmoses taking into account the probable presence of asymptomatic carriers of this bacterium.

Introduction

At present, many plant diseases have been reported to be connected with mycoplasma infections,

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